

INTERNATIONAL SEARCH REPORT

PCT/IB2004/051795

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L21/8247 H01L21/28 H01L27/115 H01L21/336 H01L29/788

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 991 204 A (CHANG ET AL) 23 November 1999 (1999-11-23) the whole document	1-11
X	WO 00/51188 A1 (CHEN, CHIOU-FENG) 31 August 2000 (2000-08-31) page 18, line 14 - page 22, line 5; figures 13A-13G	1-11
X	DE 197 30 762 A1 (LG SEMICON CO., LTD., CHEONGJU, KR) 2 July 1998 (1998-07-02) column 3, line 40 - column 5, line 22; figures 4A-4E	1-11
A	US 5 986 303 A (CHOI ET AL) 16 November 1999 (1999-11-16) the whole document	1-11
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *g* document member of the same patent family

Date of the actual completion of the international search

1 February 2005

Date of mailing of the international search report

09/02/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PATENT ABSTRACTS OF JAPAN vol. 018, no. 629 (E-1637), 30 November 1994 (1994-11-30) & JP 06 244432 A (RICOH CO LTD), 2 September 1994 (1994-09-02) abstract</p> <p>-----</p>	1-11

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PCT/IB2004/051795

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5991204	A	23-11-1999	US	6043530 A	28-03-2000
			US	6125060 A	26-09-2000
			US	6101131 A	08-08-2000
			US	6261907 B1	17-07-2001
WO 0051188	A1	31-08-2000	US	6140182 A	31-10-2000
			US	6091104 A	18-07-2000
			CN	1300444 T	20-06-2001
			EP	1076916 A1	21-02-2001
			JP	2002538608 A	12-11-2002
			TW	439280 B	07-06-2001
			US	6291297 B1	18-09-2001
DE 19730762	A1	02-07-1998	KR	221619 B1	15-09-1999
			JP	3542262 B2	14-07-2004
			JP	10200003 A	31-07-1998
			US	6271091 B1	07-08-2001
			US	5874759 A	23-02-1999
US 5986303	A	16-11-1999	KR	215883 B1	16-08-1999
			JP	3148976 B2	26-03-2001
			JP	10092961 A	10-04-1998
			US	6239009 B1	29-05-2001
JP 06244432	A	02-09-1994	JP	3283614 B2	20-05-2002